

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A chimeric molecule comprising a peptide angiogenic factor covalently linked to a targeting peptide capable of specifically binding to cardiac vascular endothelium, and wherein the targeting peptide comprises the [[a]] targeting peptide sequence from the group consisting of GGGVFWQ (SEQ ID NO:1), HGRVRPH (SEQ ID NO:2), VVLVTSS (SEQ ID NO:3), CLHRGNSC (SEQ ID NO:4), or [[and]] CRSWNKADNRSC (SEQ ID NO:5) or a and their functionally equivalent peptide sequence, wherein the functionally equivalent peptide sequence differs from the targeting peptide sequence by a single conservative amino acid substitution. sequences having one or two conservative amino acid substitutions.

Claim 2 (original): The chimeric molecule of claim 1, wherein the angiogenic factor specifically binds to at least one of VEGF-R1, VEGF-R2, or VEGF-R3.

Claim 3 (previously presented): The chimeric molecule of claim 1, wherein the targeting peptide is selected from the group consisting of GGGVFWQ (SEQ ID NO:1); HGRVRPH (SEQ ID NO:2), VVLVTSS (SEQ ID NO:3), CLHRGNSC (SEQ ID NO:4), and CRSWNKADNRSC (SEQ ID NO:5).

Claim 4 (original): The chimeric molecule of claim 1, wherein the angiogenic factor is vascular endothelial growth factor A (VEGF-A), vascular endothelial growth factor A₁₂₁ (VEGF- A₁₂₁), vascular endothelial growth factor A₁₄₅ (VEGF-A₁₄₅), vascular endothelial growth factor A₁₆₅ (VEGF- A₁₆₅), vascular endothelial growth factor A₁₈₉ (VEGF- A₁₈₉), vascular endothelial growth factor A₂₀₆ (VEGF- A₂₀₆), vascular endothelial growth factor B (VEGF-B), vascular endothelial growth factor B₁₆₇ (VEGF- B₁₆₇), vascular endothelial growth factor B₁₈₆

(VEGF-B₁₈₆), vascular endothelial growth factor C (VEGF-C), vascular endothelial growth factor D (VEGF-D), vascular endothelial growth factor E (VEGF-E), placental growth factor (PlGF), acidic fibroblast growth factor (aFGF), basic fibroblast growth factor (bFGF), or angiopoietin-1 (Ang1).

Claim 5 (original): The chimeric molecule of claim 1, wherein the angiogenic factor is Ang2, endostatin or angiostatin.

Claim 6 (currently amended): The chimeric molecule of claim 1, wherein the molecule is a fusion protein having an amino acid sequence which comprises a first subsequence having the amino acid sequence of the peptide angiogenic factor and a second subsequence having the amino acid sequence of the targeting peptide.

Claim 7 (previously presented): The chimeric molecule of claim 6, wherein the angiogenic factor is VEGF-B, vascular endothelial growth factor B₁₆₇ (VEGF-B₁₆₇), vascular endothelial growth factor B₁₈₆ (VEGF-B₁₈₆), or vascular endothelial growth factor C (VEGF-C).

Claims 8-27 (canceled).

Claim 28 (original): A pharmaceutical composition comprising the chimeric molecule of claim 1 and a pharmaceutically acceptable carrier.

Claim 29 (previously presented): A pharmaceutical composition comprising the chimeric molecule of claim 6.

Claim 30 (previously presented): The chimeric molecule of claim 1, wherein the angiogenic factor is a VEGF homolog.

Claim 31 (previously presented): The chimeric molecule of claim 30, wherein the targeting peptide is selected from the group consisting of GGGVFWQ (SEQ ID NO:1), HGRVRPH (SEQ ID NO:2), VVLVTSS (SEQ ID NO:3), CLHRGNSC (SEQ ID NO:4), and CRSWNKADNRSC (SEQ ID NO:5).

Claim 32 (previously presented): A pharmaceutical composition comprising the chimeric molecule of claim 2 and a pharmaceutically acceptable carrier.

Claim 33 (previously presented): A pharmaceutical composition comprising the chimeric molecule of claim 3 and a pharmaceutically acceptable carrier.

Claim 34 (previously presented): A pharmaceutical composition comprising the chimeric molecule of claim 4 and a pharmaceutically acceptable carrier.

Claim 35 (previously presented): A pharmaceutical composition comprising the chimeric molecule of claim 30 and a pharmaceutically acceptable carrier.

Claims 36 to 38 (canceled).

Claim 39 (new): The chimeric molecule of claim 3 wherein the angiogenic factor specifically binds to at least one of VEGF-R1, VEGF-R2, or VEGF-R3.

Claim 40 (new): The chimeric molecule of claim 3, wherein the angiogenic factor is vascular endothelial growth factor A (VEGF-A), vascular endothelial growth factor A₁₂₁ (VEGF-A₁₂₁), vascular endothelial growth factor A₁₄₅ (VEGF-A₁₄₅), vascular endothelial growth factor A₁₆₅ (VEGF-A₁₆₅), vascular endothelial growth factor A₁₈₉ (VEGF-A₁₈₉), vascular endothelial growth factor A₂₀₆ (VEGF-A₂₀₆), vascular endothelial growth factor B (VEGF-B), vascular endothelial growth factor B₁₆₇ (VEGF-B₁₆₇), vascular endothelial growth factor B₁₈₆ (VEGF-B₁₈₆), vascular endothelial growth factor C (VEGF-C), vascular endothelial growth factor D (VEGF-D), vascular endothelial growth factor E (VEGF-E), placental growth factor (PlGF), acidic fibroblast growth factor (aFGF), basic fibroblast growth factor (bFGF), or angiopoietin-1 (Ang1).

Claim 41 (new): The chimeric molecule of claim 3, wherein the angiogenic factor is Ang2, endostatin or angiostatin.